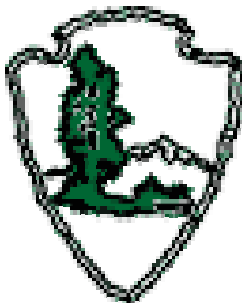
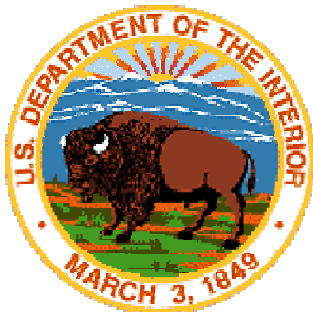


The Electric Bus: An Alternative Fuel Vehicle in the Lyndon B. Johnson National Historical Park



National Park Service



National Park Service Expands Alternative Fuels Fleet

If you're among the millions visiting national parks in the U.S. during the next few years, you'll be breathing a little easier because a growing number of vehicles serving the parks will not be powered by gasoline or diesel fuel. The national parks are adding more vehicles using alternative fuels as part of a federal program to reduce vehicle pollution in those treasured environments.

The program is sponsored the U.S. Department of Energy (DOE), U.S. Department of the Interior (DOI), DOE's National Renewable Energy Laboratory (NREL), and the National Park Service (NPS). The objective is to demonstrate how using alternative fuel vehicles (AFV) can improve the environment at the parks, while allowing the vehicles to perform efficiently and cost-effectively.

About the Electric Bus

One of the "cleaner air" vehicles is this electric bus that transports you from the Lyndon B. Johnson National Historical Park Visitor Center in Johnson City, Texas, to the Johnson Settlement. The Johnson Settlement is the historic center of the cattle driving operation founded by President Johnson's grandfather after the Civil War.

This bus, which was acquired in 1999 through the government's excess property program, replaces an older propane bus. The park has used tour buses powered by propane, another alternative fuel, since 1974. The electric bus was previously used at the Department of Defense's NORAD complex in Colorado. While the park was able to acquire the vehicle at no cost, the bus needed work and modifications. To accomplish this work, the park applied for and received funding from the federal agencies sponsoring alternative fuels programs. The modifications involved adding newer technology to the bus to upgrade its charging system, motor controllers, and other equipment, and an audio system was added to enhance the tour guide's narration about the historic scene.

This 17-passenger electric bus is used to transport park visitors from the visitor center to the Johnson Settlement.



The What & Why of Alternative Fuels

Alternative vehicle fuels include electricity, ethanol, methanol, natural gas, propane, and biodiesel. These fuels are currently powering a variety of commercial, personal, and government vehicles, including heavy-duty long-haul trucks, garbage packers and dump trucks, snow plows, package delivery vans, buses, taxicabs, and passenger cars.

Government agencies and many companies are in partnerships to expand the use of alternative fuels in vehicles. They share the national concern for the environment and recognize the need to reduce the nation's dependence on petroleum from foreign sources. The transportation sector currently accounts for approximately two-thirds of all U.S. petroleum use and roughly one-fourth of the total U.S. energy consumption.

Visit the "clean air" partners

U.S. Department of Energy (DOE),
<http://www.doe.gov/>

DOE's Office of Transportation Technologies,
<http://www.ott.doe.gov/>

DOE's Alternative Fuels Data Center, <http://www.afdc.doe.gov/>

U.S. Department of the Interior,
<http://www.doi.gov/>

National Park Service,
http://www.nps.gov/LBJ_Historical_Park at <http://www.nps.gov/lyjo/>

For additional information about LBJ National Historical Park, contact: Darryl Weisenbach, 830-644-2241, Ext. 1, or visit the website at <http://www.nps.gov/lyjo>.

For information about alternative fuels, contact Helen Latham at Battelle, 614-424-4062 or lathamh@battelle.org.

2/2000

Other AFV Locations

Alternative fuels are now being used in nearly 600 light-duty and transit vehicles in national parks and facilities nationwide. The alternative fuels powering these vehicles include compressed natural gas (CNG), electricity, ethanol, methanol, propane, and biodiesel. The first alternative fuel vehicle in this program—a CNG-powered trash packer—began service in December 1997 at the National Capital Parks' Central District in Washington, D.C.

Here are examples of other parks and facilities participating in this federal program where you can see a heavy- or medium-sized alternative fuel vehicle at work or have the opportunity to ride in one.

Park/Facility Location	Fuel	Vehicle Type
Grand Canyon National Park, AZ	CNG	Dump Truck
Redwood National & State Parks, CA	Electric	Maintenance Truck
Cumberland Island National Seashore, GA	Electric	Tram Engine
Bureau of Indian Affairs Schools, NM	CNG	School Bus
Gateway National Recreation Area, NY	Electric	Tram Engine
Zion National Park, UT	Electric	Tram Engine

Before the new or re-powered alternative fuel vehicles can be used, park facilities may need to be modified, such as by installing fuel storage facilities and dispensing equipment. People who refuel, repair, or drive the vehicles may need to be trained in using the new fuels.



Scenes from the Johnson Settlement. President Johnson took great pride in his heritage and the land where he was born and nurtured. Soon after he left office, the National Park Service used funds he donated to purchase the Johnson Settlement area.